

Amendments to the Specification

Please replace paragraph [0008] with the following amended paragraph:

[0008] Commonly assigned co-pending U.S. Patent Application Serial Number 10/812,584 filed March 30, 2004 10/_____ (Attorney Docket Number GP-303148), the disclosure of which is hereby incorporated by reference herein in its entirety, describes a method to control a direct-injection gasoline engine during LNT regeneration events thereby improving driveability by timing transitions to homogeneous operation in accordance with fuel/air equivalence ratio considerations. Further, commonly assigned co-pending U.S. patent Application Serial Number 10/812,467 filed March 30, 2004 10/_____ (Attorney Docket Number GP-303123) also directed to a control strategy for lean NOx trap regeneration whereby the number of regeneration events carried out when a lean burn SIDI engine is otherwise running in a stratified mode are minimized, is hereby incorporated by reference herein in its entirety. However, lean NOx trap regenerations are still required under some stratified mode operating conditions and there is usually potential for undesirable degraded driveability during the occurrence of such regeneration events.

Please replace paragraph [0036] with the following amended paragraph:

[0036] At block 204, a determination is made as to whether or not the engine is running. If the engine is not running, the routine is exited as at block 206. If the engine is running, a determination is made as to whether the engine is operating in a stratified mode at the start of a lean NOx trap regeneration event thereby requiring a transition out of stratified engine operation as indicated at block 208, for example as disclosed in commonly assigned, co-pending U.S. Patent Application Serial Number 10/812,467 10/_____ (Attorney Docket Number GP303123). If the

engine is not transitioning from stratified mode for the lean NOx trap regeneration transition, the routine is exited.

Please replace paragraph [0040] with the following amended paragraph:

[0040] A determination is made as to whether the lean NOx trap regeneration event is over as at block 220, e.g. as disclosed in commonly assigned, co-pending U.S. Patent Application Serial Number 10/812,467 10/_____ (Attorney Docket Number GP-303123) and commonly assigned U.S. Patent No. 6,293,092. If the lean NOx trap regeneration event is not over, the routine returns to block 216 to continue controlling engine operation as described. If the lean NOx trap regeneration event is over, the step of applying a compensating control torque is ended, the base desired torque is restored as at block 222, and the routine is exited.

Please replace paragraph [0041] with the following amended paragraph:

[0041] This concept has been implemented on a prototype vehicle equipped with a spark-ignited direct-injection engine. FIGS. 6 and 7 show measured data on this prototype vehicle during a test in which the vehicle was driven at a speed of 70 kph. FIG. 6 illustrates selected variables including throttle pedal position (Pedal position), fueling (Fuel), engine speed (Eng speed), fuel-air equivalence ratio (FA Equiv ratio), and fuel injection timing or fuel pulse angle (FPA). Here, fueling is in grams injected per engine firing event, engine speed is in RPM, and FPA is in crank angle degrees before top dead center. This measured data is for a lean NOx trap regeneration event with coordinated engine control including fuel/air equivalence ratio considerations carried out substantially as described in commonly assigned, co-pending U.S. Patent Application Serial Numbers 10/812,584 filed March 30, 2004 10/_____ (Attorney Docket Number GP-303148) and 10/812,467 10/_____ (Attorney Docket Number GP-303123) but without the benefit of the present torque compensation as described herein. A lean NOx trap regeneration

event is initiated just before 111 seconds (time T_i) and ends before 115 seconds (time T_e). FIG. 6 shows that the engine speed drops by substantially 50 RPM over this event.